

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

January 15, 2015

Mr. Dana Bayuk
Oregon Department of Environmental Quality
Northwest Region, Portland Office
Portland Harbor Section
2020 SW Fourth Avenue, Suite 400
Portland Oregon 97201-4987

HAI Project No. 2708
DEQ ECSI File No. 84

**SUBJECT: Progress Report, NW Natural Site, 7900 NW St. Helens Avenue and
7200 NW Front Avenue, Portland, Oregon**

Dear Mr. Bayuk:

Hahn and Associates, Inc. (HAI) has prepared this monthly Progress Report summarizing Remedial Investigation/Feasibility Study (RI/FS) and source control-related work activities conducted by NW Natural relating to historic manufactured gas plant (MGP) activities at the NW Natural Site during the month of December 2014. NW Natural is completing upland investigatory activities at the NW Natural Site under the Voluntary Agreement No. ECVC-WMCVC-NWR-94-13 (Voluntary Agreement) between NW Natural and the Oregon Department of Environmental Quality (DEQ).

1.0 Communications and Document Submittals

A program management implementation call was conducted with DEQ on December 11, 2014 to discuss NW Natural program management and project schedules and to discuss the iso-contour figures requested by DEQ.

Meetings or teleconferences with representatives of DEQ, NW Natural, and Siltronic occurred on December 9, 15, and 29, 2014 to discuss the development of documents related to HC&C model calibration and Phase 1 testing.

In e-mail correspondence dated December 15, 2014 (John Edwards to Dana Bayuk) Anchor QEA, on behalf of NW Natural, provided a list and proposed schedule for completion of various upcoming source control documents.

In e-mail correspondence dated December 15, 2014 (Chip Byrd to Dana Bayuk) Severson Environmental Services, Inc., on behalf of NW Natural, provided data, correspondence, and waste profile forms related to drop boxes containing source control wastewater treatment plant system residuals that were managed between October 25, 2013 and November 11, 2014.

A meeting with representatives of DEQ and NW Natural was conducted on December 17, 2014 to discuss details and final agreements related to iso-contour figures requested by DEQ. A meeting summary was provided by Anchor QEA to DEQ in correspondence transmitted December 17, 2014 (Halal Voges to Dana Bayuk, Henning Larsen, and Taku Fuji). DEQ responded to the December 17, 2014 meeting summary in e-mail correspondence dated December 23, 2014 (Dana Bayuk to Halal Voges).

In e-mail correspondence dated December 19, 2014 (Rob Ede to Dana Bayuk), HAI, on behalf of NW Natural, submitted an electronic copy of the *Environmental Monitoring*

Report, First Quarter through Fourth Quarter 2013, NW Natural Gasco Facility, Portland, Oregon, dated December 11, 2014.

In correspondence dated December 24, 2014 (Taku Fuji to Dana Bayuk) Anchor QEA, on behalf of NW Natural, submitted an electronic copy of the *Final Gasco HERA Report*, which was conditionally approved by DEQ on December 12, 2013.

2.0 Field Work

Development of newly installed monitoring wells as described within the *2014 Final SAP and QAPP for the Fill Water-Bearing Zone (WBZ)* was completed during December 2014.

HAI field activities related to monitoring and maintenance of the dense non-aqueous phase liquid (DNAPL) extraction system at surficial fill well locations MW-6-32 and MW-13-30 occurred during December. The system recovered approximately 49 gallons of fluids in December, primarily DNAPL.

Tasks related to optimization of the hydraulic control and containment (HC&C) system and the wastewater treatment system (continued operation and testing) were conducted in December 2014.

Baseline DNAPL removal as needed to maintain at levels below the top of the well sumps was conducted by Anchor QEA during December 2014 in the following wells near the river shoreline.

- MW-26U
- MW-38U
- MW-PW-2L
- PW-2L

On March 31, 2014 NW Natural discontinued discharges of treated groundwater to the sanitary sewer (Industrial Wastewater Discharge Permit 500.022). All water is now directed to NW Natural's on-site wastewater treatment plant and discharged to the Willamette River consistent with National Pollutant Discharge Elimination System (NPDES) Permit No. 103061 (expires August 31, 2018). Results from NW Natural's NPDES effluent sampling are provided to DEQ in Discharge Monitoring Reports that are submitted on a monthly basis in accordance with the permit. As of December 31, 2014 a total of 83,931,660 gallons of treated water were discharged under the NPDES permit.

Site-wide groundwater level and DNAPL measurements were conducted by NW Natural at the Gasco and Siltronic properties on December 30, 2014 comprising the fourth quarter 2014 routine groundwater monitoring event.

3.0 Anticipated Activities January and February 2015

NW Natural and DEQ technical working group communications and meetings are anticipated to occur as needed during January and February 2015 to discuss ongoing project tasks.

The *HC&C Model Calibration and Validation Report* and the *HC&C Phase 1 Testing Report* are in preparation.

One monitoring well installed in November 2014 (MW-41U) as part of the 2014 *Final SAP and QAPP for the Fill WBZ* was damaged during installation and will require replacement during January 2015.

Initiation of supplemental Doane Creek investigation activities remains contingent upon receipt of DEQ confirmation that the analyte list and screening levels are suitable for the Siltronic MGP Human Health and Ecological Risk Assessment. Legal access agreements with the off-site property owner (Burlington Northern Railroad) will also be necessary prior to initiation of field activities.

Transport and recycling of the oil-water mixture originating from the TCE CMMA at the Siltronic property will be scheduled following further discussion with DEQ. DEQ provided feedback regarding this item in a letter dated September 4, 2014. As suggested in DEQ's September 4 letter, Siltronic collected a sample from PW-2L for cVOC analysis on January 5, 2015.

The following reports and work plans for the Site have been submitted to DEQ through the date of this progress report. Unless otherwise noted, NW Natural has not received DEQ comments on these documents.

- NW Natural's June 5, 2014 request (Rob Ede to Dana Bayuk) requesting concurrence of a final proposed analyte list and screening levels for use in the Doane Creek-related FSP being conducted as part of the Siltronic property RI.
- *Response to DEQ Request for Supplemental Information on Location of Former Industrial Use Supply Well, Mult 802, NW Natural Gasco Property*, transmitted by HAI (Rob Ede to Dana Bayuk), dated August 13, 2014.
- *Human Health and Ecological Risk Assessment Report, NW Natural Gasco Site*, Prepared for Oregon DEQ by Anchor QEA, dated December 2014.

Should you have any questions, please contact the undersigned.

Sincerely,



Rob Ede, R.G.
Principal

robe@hahnenv.com

- c: Mr. Bob Wyatt, NW Natural (electronic only)
Ms. Patty Dost, Pearl Legal Group PC (electronic only)
Ms. Sarah Riddle, Pearl Legal Group PC (electronic only)
Mr. Carl Stivers, Anchor QEA, L.L.C. (electronic only)
Mr. John Edwards, Anchor QEA, L.L.C. (electronic only)
Mr. Ben Hung, Anchor QEA, L.L.C. (electronic only)
Mr. Ryan Barth, Anchor QEA, L.L.C. (electronic only)
Mr. Henning Larsen, DEQ NW Region (electronic only)
Mr. Tom Gainer, DEQ NW Region (electronic only)
Mr. Keith Johnson, DEQ NW Region (electronic only)

Mr. Myron Burr, Siltronic Corporation (electronic only)
Ms. Kristine Koch, Region 10 EPA (electronic only)
Mr. Sean Sheldrake, Region 10 EPA (electronic only)
Mr. Rene Fuentes, Region 10 EPA (electronic only)
Mr. Lance Peterson, CDM, Inc. (electronic only)